

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A process for the preparation of an olefin polymer which comprises ~~effecting~~ conducting olefin polymerization under essentially constant conditions in a single reactor in the presence of a catalyst system comprising a support material coimpregnated with at least two metallocene olefin polymerisation catalysts having different propensities for incorporation of polymer chain defects, said metallocenes being selected to produce an olefin polymer comprising at least a higher molecular weight fraction and a lower molecular weight fraction provided the second metallocene is bis(pentamethylcyclopentadienyl) zirconium dichloride, wherein the polymer chain defect content of said higher molecular weight fraction is at least 3 time that of said lower molecular weight fraction.

2. (Original) A process as claimed in claim 1 wherein said metallocenes are selected so that the polymer chain defect content of said higher molecular weight fraction is at least 10 times that of said lower molecular weight fraction.

3. Cancelled

4. (Currently amended) A process as claimed in claim 3 1 wherein the catalyst system comprises at least a first metallocene selected from rac-dimethylsilyl bis(2-methyl-4-phenylindenyl) zirconium dichloride, and bis(n-butylcyclopentadienyl) hafnium dichloride, ethyl bis(1-fluorenyl) zirconium dichloride ~~and a second metallocene selected~~

~~from bis(pentamethylecyclopentadienyl) zirconium dichloride, bis (n-butylecyclopentadienyl) zirconium dichloride and dimethylsilyl bis (9-fluorenyl) zirconium dichloride.~~

5. (Previously presented) A process as claimed in claim 1 wherein the catalyst system further comprises a cocatalyst.

6. (Original) A process as claimed in claim 5 wherein said cocatalyst is methyl aluminoxane.

7. (Previously presented) A process as claimed in claim 1 wherein the support material is porous particulate silica.

8. (Previously presented) A process as claimed in claim 1 wherein ethylene or propylene is polymerised.

9. (Currently amended) A process as claimed in claim 8 wherein polymerization is ~~effected~~ conducted in the presence of an α -olefin comonomer containing up to 10 carbon atoms.

10. (Original) A process as claimed in claim 9 wherein ethylene is copolymerized with 1-hexene.

Claims 11-18 cancelled.